

Wheat Poisoning of Cattle



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WHEAT POISONING OF CATTLE

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Wheat poisoning, sometimes termed grass staggers or grass tetany, is an acutely fatal disease occurring among cattle that are on lush, succulent, rapidly growing pasture. In the United States in general and in Texas in particular it is usually found only in cattle on wheat pasture. The mortality is high and death may result within an hour.

The name "wheat poisoning" is not a perfect choice as the condition is not a poisoning in the true meaning of a poison. However, due to its common usage, plus the lack of a more correct title for the condition, it will probably continue to be used.

The underlying cause of this condition is not known. In affected animals, the blood usually contains less than the normal amount of calcium. (This is why the disease so closely resembles "milk fever" in the recently freshened dairy cow). There is no proof of what pulls the calcium out of the blood stream. Several investigators are of the opinion that a high intake of potassium upsets the necessary calcium-phosphorus balance, resulting in a lowering of the calcium in the blood stream.

The symptoms of this disease are not constant. However, they do divide themselves into several groups. One group is sometimes called the "nervous type." In this group there is an anxious or wild expression, grinding of the teeth, erect ears, frequent urination, and sometimes a paralysis of the hindquarters. In another group conditions that closely resemble "milk fever" in dairy cattle are found. The animal shows a dullness, a lack of appetite, and staggering. This staggering usually terminates with a paralysis of the hindquarters. The animal will go into a coma and, unless treated, dies without regaining consciousness.

The third group of symptoms may follow either of the above types. In this phase there are spasms or convulsions. Most investigators believe the convulsions follow any disturbance to the animal, such as rough handling, attempted treatment, or irritating or frightening the animal in any way. The animal goes down and unless treatment is prompt after the convulsions begin, the animal will die.

The temperature may be normal or below normal. This sometimes helps in differentiating the disease from one due to infection.

A treatment that is quite successful and to which all forms of the disease seem to respond, consists of a fairly large amount (250-500cc) of a solution of calcium gluconate or calcium chloride injected into a vein. If at all possible, this treatment should be administered by a veterinarian. This is advisable because if the injection is administered under the skin, it may cause sloughing of the muscle and skin, and the desired effect is not obtained. It may also be necessary to administer a heart stimulant before, after, or during the injection of the calcium. Most investigators feel one injection of calcium is sufficient.

As the true cause of the disease is not known, proper prevention is a matter of speculation. Cattlemen who have dealt with the disease feel the addition of roughage to the diet works quite well in preventing the disease. The type of roughage does not seem to be important. The use of good quality minerals that are readily available may help prevent the condition and will promote general health.

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